yellow sandshell

Lampsilis teres

Kingdom: Animalia
Division/Phylum: Mollusca
Class: Bivalvia

Features

The yellow sandshell mussel has a moderately thick, elongate, “inflated,” smooth shell. The anterior end is rounded while the posterior is pointed in males and squared in females. The outside of the shell is yellow and it may have greenish rays. The inside of the shell is silvery-white. The yellow sandshell may grow to six inches long.

Natural History

The yellow sandshell lives in the sand or gravel bottom of medium to large rivers. It is endangered in Iowa. Its distribution in Iowa is not well documented. Freshwater mussels have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Hosts for this mussel include nine fish species, mainly gars and sunfish. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

interior rivers and streams; Mississippi River

Iowa Status

endangered; native

Siltation and other unknown water quality impacts from changing land use have greatly impacted mussel populations. Populations of some fish species which served as hosts for mussels have declined. The exotic zebra mussel greatly stresses remaining native mussels by covering their shells and competing for food.

Iowa Range

Mississippi River pools 10 &19; northeastern two-thirds of Iowa

Bibliography

Iowa Department of Natural Resources. 2001. *Biodiversity of Iowa: Aquatic Habitats* CD-ROM.